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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,355	07/02/2004	Toru Iwai	SIC-04-010	8415

29863 7590 06/30/2005

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EXAMINER

TORRES, MELANIE

ART UNIT PAPER NUMBER

3683

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,355

Applicant(s)

IWAI ET AL.

Examiner

Melanie Torres

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "first fixing component," "first second fixing component," and "second second fixing component" do not have antecedent basis in the specification.
2. Claims 1-22 are objected to because of the following informalities: "first second fixing component" and "second second fixing component" are awkward and should be re-written with clearer terminology. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 9-15 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. in view of Otomo (JP 2679162).

Re claims 1-3 and 9-15 and 22, Cook et al. teach a disk brake rotor apparatus comprising: a generally circular first rotor (20) member, a generally circular first second rotor (22) member with a first second fixing component structured to mount the first

Art Unit: 3683

second rotor member to the hub mounting member, wherein the first rotor member is attached to a side of the first second rotor member, and wherein the first second rotor member is formed of a material having greater braking wear resistance than the first rotor member. (See Figures 2 and 3 and Column 1, line 63 – Column 2, line 8)

However, Cook et al. do not teach wherein the first rotor member comprises a first fixing component structured to mount the first rotor member to a hub mounting member.

Otomo teaches wherein the first rotor member (1) comprises a first fixing component (5) structured to mount the first rotor member to a hub mounting member. It would have been obvious to one of ordinary skill in the art to have provided the fixing component of Otomo in the disc brake rotor of Cook et al. in order to provide a means for attaching the disc to a hub.

Re claim 14, Cook et al. do not teach wherein the fasteners are aluminum. It would have been obvious to one of ordinary skill in the art at the time the invention was made since aluminum fasteners are known for their corrosion resistance.

5. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. in view of Otomo as applied above and further in view of Gwelber et al.

Re claim 4, Cook et al. as modified does not teach wherein the first rotor member comprises aluminum and wherein the first second rotor member and the second second rotor member comprise stainless steel. Gwelber et al. teach wherein the first rotor (18) member comprises aluminum and wherein the first second rotor member and the

Art Unit: 3683

second second rotor member (10) comprise stainless steel. (Column 3, line 57 – Column 4, line 6) It would have been obvious to use stainless steel for an outer rotor since stainless steel is known for its strength and corrosion resistance. It would have been further obvious to use aluminum for an inner rotor since aluminum is known for its heat dissipation characteristics.

Claims 5-8 are deemed by the examiner to be product by process claims.

Product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps.

6. Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. in view of Otomo as applied above and further in view of Seymour.

Re claims 16-21, Cook as modified does not teach wherein the hub mounting member comprises a centrally disposed hub attachment component structured to be mounted to the hub; and a rotor attachment component extending radially outwardly from the hub attachment component and structured to mount to the first fixing component, to the first second fixing component and to the second second fixing component. Seymour teaches a hub mounting member (Figure 3) comprising a centrally disposed hub attachment component structured to be mounted to the hub; and a rotor attachment component extending radially outwardly from the hub attachment component and structured to mount to the first fixing component, to the first second fixing component and to the second second fixing component. It would have been

Art Unit: 3683

obvious to one of ordinary skill in the art at the time the invention was made to have provided the hub mounting member of Seymour in the apparatus of Cook et al. in order to facilitate connection of the rotor to the hub.

Response to Arguments

7. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3683

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (571)272-7127. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571)272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MT
June 24, 2005

Melanie Torres
6-24-05